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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------------------------------------|-----------------|----------------------|--------------------------|------------------|
| 10/786,164 | 02/26/2004 | Andrew Jay Bean | 3638-115 | 9134 |
| 23117 | 7590 03/20/2006 | | EXAMINER | |
| NIXON & VANDERHYE, PC | | | CHIN SHUE, ALVIN C | |
| 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203 | | | ART UNIT | PAPER NUMBER |
| | • | | 3634 | |
| | | | DATE MAIL ED. 02/20/2006 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|--------------|--|--|--|--|
| | 10/786,164 | BEAN ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Alvin C. Chin-Shue | 3634 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on 06 Oc | ctober 2005 | | | | | |
| | action is non-final. | | | | | |
| · | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | | | | | | |
| · | | | | | | |
| 4) Claim(s) 1-22 is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6) Claim(s) <u>1-22</u> is/are rejected. | | | | | | |
| , | 7) Claim(s) is/are objected to. | | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| Application Papers | | | | | | |
| 9)☐ The specification is objected to by the Examiner. | | | | | | |
| 10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal F 6) Other: | | | | | |

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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Claims 1-16,19 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith, Jr. '757 in view of Foley, MacDonald et al. or Backer et al. Smith teaches the claimed method and lift with the exception of the pivotally coupled main boom. Foley, MacDonald and Backer all teach pivotally coupled main booms for pivotally supporting a workbasket to a tower boom. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Smith to comprise a pivotally coupled main boom, as taught by Foley, MacDonald or Backer, to enhance positioning of a work basket. To prevent the extension of the tower boom until it reaches a predetermined angle as claimed would have been an obvious mechanical expediency. To use a single control switch to control the raising and lowering of his Tower boom, as is conventional, would have been an obvious mechanical expedient.

Claims 3-5,12-14,17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith and Foley, MacDonald or Backer, as applied above, and further in view of Kishi. Kishi teaches a sensor and the movement of a boom nose

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pin following a path as claimed. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Smith to comprise a sensor and for his nose pin to follow a path, as taught by Kishi, to enhance stability of his lift.

Claims 18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith and Foley, MacDonald or Backer and Kishi, as applied to claims 17 and 20 above, and further in view of Rocke. Rocke teaches rotation sensors between pivotally attached main boom 115 and a tower boom 110 and a rotation sensor attached between the tower boom to determine the angle of the tower boom 115, wherein a control system determine the angle of the main boom based on the output of the sensors. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the booms of Smith to comprise sensors, as taught by Rocke, to determiner the angle of the main boom.. To use a conventional inclinometer as a sensor for the inclination of the tower boom, in lie of the angle sensor, as taught by Rocke, would have been an obvious mechanical expediency.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**.

See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alvin C. Chin-Shue whose telephone number is 571-272-6828. The examiner can normally be reached on Monday-Friday, 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on 571-272-6777. The fax

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phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alvin C. Chin-Shue

Examiner

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ACS